Virginia Title V Operating Permit

Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, and 9 VAC 5-80-50 through 9 VAC 5-80-300 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name:	KTI Energy of Virginia, Inc.	Registration:	30826
Facility Name:	KTI Energy of Martinsville, Inc.	AIRS Number:	51-089-0083
Facility Location: At the intersection of Lester Street and		Permit Number:	VA-30826
	Commonwealth Boulevard in Martinsville,		
	Virginia		

October 29, 2001	
Effective Date	
October 29, 2006	
Expiration Date	
Dennis H. Treacy	Signature Date
Director, Department of Environr	nental Quality

Table of Contents, 1 page Permit Conditions, 26 pages

Table of Contents

I.	FACILITY INFORMATION	3
II.	EMISSION UNITS	4
III. OLI	FUEL BURNING EQUIPMENT REQUIREMENTS – EMISSION UNIT 1, KEELER DORR- VER BOILER	5
A.B. C. D.	RECORDKEEPINGTESTING	
IV.	FACILITY WIDE CONDITIONS	12
A	. MONITORING AND RECORDKEEPING	12
V.	INSIGNIFICANT EMISSION UNITS	13
VI.	PERMIT SHIELD & INAPPLICABLE REQUIREMENTS	14
VII.	GENERAL CONDITIONS	15
A		
B.		
C.		
D.		
E. F.		
G.		
Н.		
I.	FUGITIVE DUST EMISSION STANDARDS	
J.	Severability	
K.	DUTY TO COMPLY	21
L.		
M		
N.		
Ο.		
P.		
Q. R.		
S.		
З. Т.		
U.		
V.	PERMIT REVOCATION OR TERMINATION FOR CAUSE	25
W		
X.	STRATOSPHERIC OZONE PROTECTION	25
Y.		
Z.		
Α	A FMISSIONS TRADING	26

KTI of Martinsville, Inc. Permit Number: VA-30826 October 29, 2001 Page 3 of 26

I. Facility Information

Permittee Responsible Official

KTI Energy of Virginia, Inc. Mr. John Helton

P. O. Box 717 Vice President of Virginia Operations

Ridgeway, Virginia 24148

FacilityKTI Energy of Martinsville, Inc.
Mr. John Helton

KTI Energy of Martinsville, Inc.

P. O. Box 717

Mr. John Helton

Vice President of Virginia Operations

Ridgeway, Virginia 24148 540-632-4071

Registration Number: 30826

AIRS Identification Number: 51-089-0083

Facility Description: SIC Code 4961 - sale of steam for industrial purposes. This facility, formerly named "Multitrade of Martinsville, Inc.", initially received a permit dated July 24, 1987 to construct and operate one 120 x 10⁶ Btu/hr (heat input) wood/coal-fired spreader stoker boiler and related ancillary equipment (insignificant emission units). This permit was amended on November 30, 1987 and May 24, 1988, and superseded by a new permit dated April 23, 1999.

The plant is by definition a Title V major source due to potential emissions of criteria pollutants sulfur dioxide, nitrogen oxides and carbon monoxide in excess of 100 tpy. It is located in an attainment area for criteria pollutants. The boiler is subject to NSPS Subpart Db requirements. No alternative operating scenarios have been requested.

KTI of Martinsville, Inc. Permit Number: VA-30826 October 29, 2001 Page 4 of 26

II. Emission Units

Equipment to be operated consists of:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
Fuel Burning Equipment							
			106	Zurn multicyclone	EP 1/1		
1	EP1	Keeler Dorr-Oliver water tube boiler/steam generator, installed in 1987	120 x 10 ⁶ Btu/hr (heat input)	PPC Industries electrostatic precipitator (2 fields, 24 sections)	EP 1/1	PM-10	April 23, 1999

^{*}The Size/Rated capacity and PCD efficiency is provided for informational purposes only, and is not an applicable requirement.

III. Fuel Burning Equipment Requirements – Emission Unit 1, Keeler Dorr-Oliver boiler

A. Limitations

- 1. The requirements of 40 CFR 60 Subpart Db apply to the boiler. (9 VAC 5-50-410 and Condition 8 of 4/23/99 Permit)
- Particulate emissions from the boiler shall be controlled by the use of a multicyclone followed by one (1) electrostatic precipitator (ESP).
 (9 VAC 5-80-110 and Condition 4 of 4/23/99 Permit)
- 3. The approved fuels for the boiler are wood and coal, excluding any wood which contains chemical treatments or has affixed thereto paint and/or finishing materials or paper or plastic laminates. A change in the fuels may require a permit to modify and operate.
 - (9 VAC 5-80-110 and Condition 6 of 4/23/99 Permit)
- 4. The maximum heat input of the boiler shall not exceed 120 x 10⁶ Btu/hr. (9 VAC 5-80-110 and Condition 3 of 4/23/99 Permit)
- 5. The maximum sulfur content of the coal to be burned in the boiler shall not exceed 0.9 percent by weight per shipment.(9 VAC 5-50-410, 9 VAC 5-80-110 and Condition 10 of 4/23/99 Permit)
- 6. The maximum annual sulfur content of the coal to be burned in the boiler shall not exceed 0.8 percent by weight, calculated monthly as the average of each consecutive twelve (12) month period.
 - (9 VAC 5-50-410, 9 VAC 5-80-110 and Condition 10 of 4/23/99 Permit)
- 7. The boiler shall consume no more than 11,680 tons of coal per year, calculated monthly as the sum of each consecutive twelve (12) month period. (9 VAC 5-80-110 and Condition 9 of 4/23/99 Permit)
- 8. The boiler shall consume no more than 116,800 tons of wood per year, calculated monthly as the sum of each consecutive twelve (12) month period.(9 VAC 5-80-110 and Condition 9 of 4/23/99 Permit)

9. The annual capacity factor shall be less than or equal to 30% (0.30) for coal, calculated on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month. (9 VAC 5-50-410, 9 VAC 5-80-110, 40 CFR ¹ 60.42b(d)(1), and Condition 9 of 4/23/99 Permit)

10. Emissions from the operation of the boiler shall not exceed the limits specified below:

Total Suspended 12.0 lbs/hr 52.5 tons/yr

Particulate 0.1 lbs/million BTU input

PM-10 12.0 lbs/hr 52.5 tons/yr

0.1 lbs/million BTU input

Sulfur Dioxide 159.0 lbs/hr 205.6 tons/yr

1.2 lbs/million BTU input (30-day rolling average)

Nitrogen Oxides 72.0 lbs/hr 209.1 tons/yr

(as NO₂) 0.6 lbs/million BTU input (30-day rolling average)

Carbon Monoxide 53.3 lbs/hr 233.6 tons/yr

0.44 lbs/million BTU input

Volatile Organic 18.7 lbs/hr 81.7 tons/yr

Compounds 0.16 lbs/million BTU input

The total suspended particulate and PM-10 emission standards above apply at all times except during periods of startup, shutdown and malfunction. All other emission standards above apply at all times.

- (9 VAC 5-50-260, 9 VAC 5-50-410, 9 VAC 5-80-110, 40 CFR ' 60.42b(d), 40 CFR ' 60.43b(a)(2), 40 CFR ' 60.44b(c), and Condition 13 of 4/23/99 Permit)
- 11. Visible emissions from the boiler stack shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 27 percent opacity as determined by EPA Method 9 (reference 40 CFR 60 Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.

(9 VAC 5-50-80, 9 VAC 5-80-110, 9 VAC 5-50-290, 40 CFR **'** 60.43b(f), and Condition 14 of 4/23/99 Permit)

12. Boiler emissions shall be controlled by proper operation and maintenance. Boiler operators shall be trained in the proper operation of all such equipment. Training shall consist of a review and familiarization of the manufacturer's operating instructions, at minimum.

(9 VAC 5-80-110 and Condition 5 of 4/23/99 Permit)

B. Monitoring

- 1. The multicyclone and ESP shall be provided with adequate access for inspection.
 - Multicyclone: An annual internal inspection shall be conducted on the multicyclone by the permittee to insure structural integrity.
 - ESP: The ESP shall be equipped with a device to continuously monitor the primary and secondary current (amps) and voltage (volts) by field across the ESP, and temperature (EF) within the ESP.

(9 VAC 5-80-110 and Condition 4 of 4/23/99 Permit)

- 2. Operation & Maintenance Procedures The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to the boilers and related air pollution control equipment which affect such emissions:
 - a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance for the boiler, multicyclone and electrostatic precipitator.
 - b. Develop an inspection schedule, monthly at a minimum, to insure operational integrity of the boiler, multicyclone and electrostatic precipitator, and maintain records of inspection results.
 - c. Have available written operating procedures for the boiler, multicyclone and electrostatic precipitator. These procedures shall be based on the manufacturer's recommendations, at a minimum, if such recommendations exist.
 - d. Train operators in the proper operation of the boiler, multicyclone and electrostatic precipitator and familiarize the operators with the written operating procedures. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.

Records of maintenance, inspections and training shall be maintained on site for a period of five (5) years and shall be made available to DEQ personnel upon request. (9 VAC 5-80-110, 9 VAC 5-80-110 F & K, and 9 VAC 5-50-20 E)

For the purposes of the following conditions, the term Acontinuous@ shall mean that whenever the relevant emission unit is in operation, the monitoring system shall be monitoring except during periods of system breakdowns, repairs, calibration checks, and zero and span adjustments, and the monitoring system shall be capable of completing at least one cycle of operation (i.e., measuring and recording, or measuring only, as applicable) every 15 minutes:

- 3. A continuous emission monitoring system (CEMS) consisting of a NOx monitor and an oxygen or carbon dioxide monitor shall be used to monitor the boilers NOx emissions. The monitoring system shall comply with the provisions of 40 CFR 60 Subpart Db and 40 CFR 60 Subpart A.
 - (9 VAC 5-50-40, 40 CFR ' 60.48b, and Condition 11 of 4/23/99 Permit)
- 4. A continuous emission monitoring system (CEMS) shall be used to monitor the boiler=s SO₂ emissions. The monitoring system shall comply with the provisions of 40 CFR 60 Subpart Db and 40 CFR 60 Subpart A.
 - (9 VAC 5-50-40, 40 CFR ' 60.47b, and Condition 11 of 4/23/99 Permit)
- 5. A continuous opacity monitoring system (COMS) shall be used to monitor the boiler=s visible emissions. The monitoring system shall comply with the provisions of 40 CFR 60 Subpart Db and 40 CFR 60 Subpart A. The COMS data shall be used as a parametric indicator for particulate (PM-10) emissions.

 (9 VAC 5-50-40, 40 CFR ' 60.48b, and Condition 11 of 4/23/99 Permit)
- 6. A continuous steam flow monitoring system (CSFMS) consisting of a steam flow meter and continuous recorder shall be used to monitor the steam flow to each customer from the boiler.
 - (9 VAC 5-50-40 and Condition 12 of 4/23/99 Permit)
- 7. Data from the CSFMS shall be used in addition to daily fuel logs to determine compliance with the maximum heat input of the boiler as listed in Condition III.A.4, above, and the emission limits in Condition III.A.10, above. (9 VAC 5-170-160)

C. Recordkeeping

1. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, West Central Regional Office. These records shall include, but are not limited to:

- a. Daily, monthly and annual throughput of wood and coal (in tons) for the boiler, by fuel type and HHV of each fuel. The annual throughput shall be calculated monthly as the sum of each consecutive twelve (12) month period.
- b. Annual wood and coal capacity factors, calculated as described in Condition III.A.9, above.
- c. All coal shipments purchased, indicating the sulfur and ash content of each coal shipment.
- d. Annual sulfur and ash content of the coal received, calculated monthly as the average of each consecutive twelve (12) month period.
- e. Pollutant-specific emission factors (F-factors) used for the purpose of calculating actual emission rates and the equations used in these calculations.
- f. All reports required by 40 CFR 60 Subpart Db and 40 CFR 60 Subpart A.
- g. Continuous steam flow monitoring records for all customers.
- h. Records of malfunctions of equipment which would cause a violation of any part of this permit.
- i. Written operating procedures, written maintenance procedures, training records of all operators of process equipment or air pollution control equipment, scheduled and non-scheduled maintenance, hours of operation, malfunctions, and sootblowing for the boiler and air pollution-related equipment.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years. (9 VAC 5-50-50, 9 VAC 5-80-110, 40 CFR ' 60.7, 40 CFR ' 60.49b, and Conditions 16 and 20 of 4/23/99 Permit)

- 2. The permittee shall maintain records of the required training including a statement of time, place and nature of training provided. The permittee shall have available good written operating procedures and a maintenance schedule for the boiler. These procedures shall be based on the manufacturer's recommendations, at minimum. All records required by this condition shall be kept on site and made available for inspection by the DEQ.
 - (9 VAC 5-80-110 and Condition 15 of 4/23/99 Permit)

D. Testing

- 1. The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Test ports shall be provided at the exhaust stack from the electrostatic precipitator. Upon request from the Department, additional test ports shall be provided at the appropriate locations.
 - (9 VAC 5-50-30, 9 VAC 5-80-110 and and Condition 7 of 4/23/99 Permit)
- 2. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Method (40 CFR Part 60, Appendix A)
VOC	EPA Methods 18, 25, 25a
VOC Content	EPA Methods 24, 24a
NO_x	EPA Method 7
SO_2	EPA Method 6
CO	EPA Method 10
PM/PM-10	EPA Method 5, 17
Visible Emission	EPA Method 9

(9 VAC 5-80-110)

E. Reporting

- 1. The permittee shall submit quarterly reports to the Director, West Central Regional Office, within 30 days after the end of each calendar quarter, in accordance with 40 CFR 60 Subpart Db and 40 CFR 60 Subpart A. The reports shall be submitted to EPA as well as to DEQ. Each report shall contain, at a minimum, the dates included in the calendar quarter and the following (additional details of the reports are to be arranged with the Director, West Central Region):
 - a. With regard to the SO₂ and NOx monitoring systems, the quarterly report shall include the information required under 40 CFR ¹ 60.49b, to include each 30-day rolling average SO₂ emissions rate and each 30-day rolling average NOx emissions rate.
 - b. With regard to the opacity monitoring system, the quarterly report shall include excess emission and monitoring system downtime reports and/or summaries in accordance with 40 CFR ' ' 60.7 (c) and (d). Excess opacity emissions are defined as all 6-minute periods for which the average opacity exceeds the limit given in Condition III.A.11 of this permit, including periods of startup, shutdown, and malfunction.

KTI of Martinsville, Inc. Permit Number: VA-30826 October 29, 2001 Page 11 of 26

If the boiler was not operated during the calendar quarter, the quarterly report shall consist of the dates included in the calendar quarter and a statement that no coal or wood was received or burned during the calendar quarter.

(9 VAC 5-50-50, 9 VAC 5-80-110, 40 CFR ' 60.7, 40 CFR ' 60.49b, and 9 VAC 5-

50-410)

KTI of Martinsville, Inc. Permit Number: VA-30826 October 29, 2001 Page 12 of 26

IV. **Facility Wide Conditions**

A. Monitoring and Recordkeeping

Visible Emissions: Each emissions unit with a visible emissions requirement in this permit shall be observed visually at least once each calendar week in which the emissions unit operates. The visual observations shall be conducted using 40 CFR 60 Appendix A Method 22 techniques (condensed water vapor/steam is not a visible emission) for at least a brief time to only identify the presence of visible emissions, unless the unit is monitored by a 40 CFR 60 Appendix A continuous opacity monitor. Each emissions unit in the Method 22 technique observation having visible emissions shall be evaluated by conducting a 40 CFR 60 Appendix A Method 9 visible emissions evaluation (VEE) for at least six (6) minutes, unless corrective action is taken that achieves no visible emissions. 40 CFR 60 Appendix A Method 9 requires the observer to have a Method 9 certification that is current at the time of the VEE. If any of these six (6) minute VEE averages exceed the unit's opacity limitation, a VEE shall be conducted on these emissions for at least 3 six minute periods (at least 18 minutes). All visible emission observations, VEE results, and corrective actions taken shall be recorded. (9 VAC 5-80-110E)

KTI of Martinsville, Inc. Permit Number: VA-30826 October 29, 2001 Page 13 of 26

V. Insignificant Emission Units

The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
2a	wood handling system	5-80-720 B.1	PM-10	
2b	coal handling system	5-80-720 B.1	PM-10	
3	ash handling system	5-80-720 B.1	PM-10	
4	wood storage pile	5-80-720 B.1	PM-10	

These insignificant emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

KTI of Martinsville, Inc. Permit Number: VA-30826 October 29, 2001 Page 14 of 26

VI. Permit Shield & Inapplicable Requirements

Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Applicability
40 CFR 60.42b(a)	90% SO ₂ reduction requirement in NSPS Subpart Db	40 CFR 60.42b(d)(1) applies instead

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law. (9 VAC 5-80-140)

VII. General Conditions

A. Federal Enforceability

All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.

(9 VAC 5-80-110 N)

B. Permit Expiration

This permit shall become invalid five years from the date of issuance. The permittee shall submit an application to Director, West Central Regional Office for renewal of this permit no earlier than 18 months and no later than six months prior to the date of expiration of this permit. Upon receipt of a complete and timely application for renewal, this source may continue to operate subject to final action by the DEQ on the renewal application.

(9 VAC 5-80-110 D and 9 VAC 5-80-80 F)

C. Recordkeeping and Reporting

- 1. All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:
 - a. The date, place as defined in the permit, and time of sampling or measurements.
 - b. The date(s) analyses were performed.
 - c. The company or entity that performed the analyses.
 - d. The analytical techniques or methods used.
 - e. The results of such analyses.
 - f. The operating conditions existing at the time of sampling or measurement.

(9 VAC 5-80-110 F)

KTI of Martinsville, Inc. Permit Number: VA-30826 October 29, 2001 Page 16 of 26

- 2. Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

 (9 VAC 5-80-110 F)
- 3. The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than <u>March 1</u> and <u>September 1</u> of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-80 G. [Note that much of the recordkeeping required by this permit also serves as required periodic monitoring to determine emissions compliance and therefore needs to be addressed in the periodic reports.] The details of the reports are to be arranged with the Director, West Central Regional Office. The reports shall include:
 - a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31.
 - b. All deviations from permit requirements. For purposes of this permit, deviations include, but are not limited to:
 - (1) Exceedance of emissions limitations or operational restrictions;
 - (2) Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or compliance assurance monitoring which indicates an exceedance of emission limitations or operational restrictions; or,
 - (3) Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.
 - c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that "no deviations from permit requirements occurred during this semi-annual reporting period."
 - d. The report shall be sent to the following address:

VA DEQ West Central Regional Office ATTN: Air Compliance Manager 3019 Peters Creek Road Roanoke, VA 24019

(9 VAC 5-80-110 F)

D. Annual Compliance Certification

Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and to DEQ no later than **March 1** each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

- 1. The time period included in the certification. The time period to be addressed is January 1 to December 31.
- 2. The identification of each term or condition of the permit that is the basis of the certification.
- 3. The compliance status.
- 4. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.
- 5. Consistent with subsection 9 VAC 5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period.
- 6. Such other facts as the permit may require to determine the compliance status of the source.

This annual compliance certification shall be sent to the following addresses:

VA DEQ West Central Regional Office ATTN: Air Compliance Manager 3019 Peters Creek Road Roanoke, VA 24019

U. S. Environmental Protection Agency, Region III Clean Air Act Title V Compliance Certification (3AP00) 1650 Arch Street Philadelphia, PA 19103-2029.

(9 VAC 5-80-110 K.5)

KTI of Martinsville, Inc. Permit Number: VA-30826 October 29, 2001 Page 18 of 26

E. Permit Deviation Reporting

The permittee shall notify the Director, West Central Regional Office, within four (4) daytime business hours of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the occurrence, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. The occurrence should also be reported in the next quarterly or semi-annual compliance monitoring report required by this permit.

(9 VAC 5-80-110 F.2 and 9 VAC 5-80-250)

F. Failure/Malfunction Reporting

If, for any reason, the affected facilities or related air pollution control equipment fails or malfunctions and may cause excess emissions for more than one hour, the owner shall notify the Director, West Central Regional Office, within four (4) daytime business hours of the occurrence. In addition, the owner shall provide a written statement, within 14 days, explaining the problem, corrective action taken, and the estimated duration of the breakdown/shutdown. The opacity limits in this permit apply at all times except during periods of startup, shutdown, malfunction and as otherwise provided in this permit. (9 VAC 5-20-180 C & 9 VAC 5-80-250)

G. Startup, Shutdown, and Malfunction

At all times, including periods of startup, shutdown, soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

The opacity limits in this permit apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in this permit. (9 VAC 5-50-20, 9 VAC 5-40-20)

KTI of Martinsville, Inc. Permit Number: VA-30826 October 29, 2001 Page 19 of 26

H. Malfunction as an Affirmative Defense

- 1. A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the conditions of paragraph 2 are met.
- 2. The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:
 - a. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.
 - b. The permitted facility was at the time being properly operated.
 - c. During the period of malfunction, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit.
 - d. The permittee notified the board of the malfunction within two working days following the time when the emissions limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, telegraph, or any other method that allows the permittee to comply with the deadline. The notice fulfills the requirement of 9 VAC 5-80-110 F.2. b to report promptly deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirements under 9 VAC 5-20-180 C.
- 3. In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any requirement applicable to the source.

(9 VAC 5-80-250)

KTI of Martinsville, Inc. Permit Number: VA-30826 October 29, 2001 Page 20 of 26

I. Fugitive Dust Emission Standards

During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:

- 1. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;
- 2. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;
- 3. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or other similar operations;
- 4. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and,
- 5. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9 VAC 5-40-90 and 9 VAC 5-50-90)

J. Severability

The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.

(9 VAC 5-80-110 G.1)

KTI of Martinsville, Inc. Permit Number: VA-30826 October 29, 2001 Page 21 of 26

K. Duty to Comply

The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application.

(9 VAC 5-80-110 G.2)

L. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(9 VAC 5-80-110 G.3)

M. Permit Action for Cause

- 1. This permit may be modified, revoked, reopened, and reissued, or terminated for cause as specified in 9 VAC 5-80-110 L, 9 VAC 5-80-240 and 9 VAC 5-80-260. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. (9 VAC 5-80-110 G.4)
- 2. Such changes that may require a permit modification and/or revisions include, but are not limited to, the following:
 - a. Erection, fabrication, installation, addition, or modification of an emissions unit (which is the source, or part of it, which emits or has the potential to emit any regulated air pollutant), or of a source, where there is, or there is potential of, a resulting emissions increase;
 - b. Reconstruction or replacement of any emissions unit or components thereof such that its capital cost exceeds 50% of the cost of a whole new unit;
 - c. Any change at a source which causes emission of a pollutant not previously emitted, an increase in emissions, production, throughput, hours of operation, or fuel use greater than those allowed by the permit, or by 9 VAC 5-80-11, unless such an increase in authorized by an emissions cap; or any change at a source which causes an increase in emissions resulting from a reduction in control efficiency, unless such an increase is authorized by an emissions cap;

KTI of Martinsville, Inc. Permit Number: VA-30826 October 29, 2001 Page 22 of 26

- d. Any reduction of the height of a stack or of a point of emissions, or the addition of any obstruction which hinders the vertical motion of exhaust;
- e. Any change at the source which affects its compliance with conditions in this permit, including conditions relating to monitoring, recordkeeping, and reporting;
- f. Addition of an emissions unit which qualifies as insignificant by emissions rate (9 VAC 5-80-720 B) or by size or production rate (9 VAC 5-80-720 C);
- g. Any change in insignificant activities, as defined by 9 VAC 5-80-90 D.1.a(1) and 9 VAC 5-80-720 B and 9 VAC 5-80-720 C.

(9 VAC 5-80-110 G, 9 VAC 5-80-110 J, 9 VAC 5-80-240, and 9 VAC 5-80-260)

N. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege. (9 VAC 5-80-110 G.5)

O. Duty to Submit Information

- 1. The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality. (9 VAC 5-80-110 G.6)
- 2. Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-80 G.

 (9 VAC 5-80-110 K.1)

KTI of Martinsville, Inc. Permit Number: VA-30826 October 29, 2001 Page 23 of 26

P. Duty to Pay Permit Fees

The owner of any source for which a permit under 9 VAC 5-80-50 through 9 VAC 5-80-300 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-355. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by **April 15** of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department. (9 VAC 5-80-110 H and 9 VAC 5-80-340 C)

Q. Alternative Operating Scenarios

Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80, Article 1. (9 VAC 5-80-110 J)

R. Inspection and Entry Requirements

The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

- 1. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.
- 2. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.
- 3. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
- 4. Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9 VAC 5-80-110 K.2)

KTI of Martinsville, Inc. Permit Number: VA-30826 October 29, 2001 Page 24 of 26

S. Reopening For Cause

The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-80F.

- 1. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
- 2. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
- 3. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-110 D.

(9 VAC 5-80-110 L)

T. Permit Availability

Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request. (9 VAC 5-80-150 E)

U. Transfer of Permits

- No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another. (9 VAC 5-80-160)
- 2. In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-200. (9 VAC 5-80-160)

KTI of Martinsville, Inc. Permit Number: VA-30826 October 29, 2001 Page 25 of 26

3. In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-200. (9 VAC 5-80-160)

V. Permit Revocation or Termination for Cause

A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 1. The Board may suspend, under such conditions and for such period of time as the Board may prescribe, any permit for any of the grounds for revocation or termination or for any other violations of these regulations. (9 VAC 5-80-260)

W. Duty to Supplement or Correct Application

Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit. (9 VAC 5-80-80 E)

X. Stratospheric Ozone Protection

If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F. (40 CFR Part 82, Subparts A-F)

Y. Accidental Release Prevention

If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.

(40 CFR Part 68)

KTI of Martinsville, Inc. Permit Number: VA-30826 October 29, 2001 Page 26 of 26

Z. Changes to Permits for Emissions Trading

No permit revision shall be required under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit. (9 VAC 5-80-110 I)

AA. Emissions Trading

Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:

- 1. All terms and conditions required under 9 VAC 5-80-110, except subsection N, shall be included to determine compliance.
- 2. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.
- 3. The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-50 through 9 VAC 5-80-300.

(9 VAC 5-80-110 I)